edewlogics

Limits, continuity and the indefinite zero quotient

Authors Notes

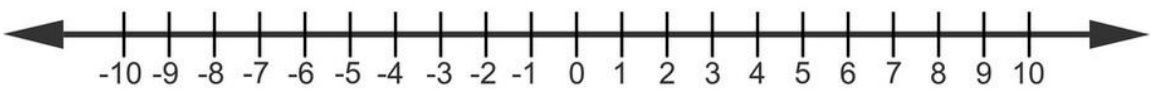
This essay is brought to you without prejudice, with great beliefs in truth, decency, dignity and inclusion in science. Please help make a true generational difference in the future of science and humanity. Donate to the free books for life cause today.

DONATE TO SUPPORT THE FREE BOOKS FOR

It's difficult to write love notes about mathematics unless like me, you are truly and irrevocably in love with it. Yet I won't be writing love notes about mathematics. I will be discussing the intricacies that make it intuitively intercepted with the implicitly, explicitly existential and environmental language of nature. Sometimes nature's languages are as intimated as they are individualistic and distinctive.

As a math lover and a musician, I often wonder why James Stewart, a notable Calculus textbook author, now dead, often uses music notation and instrumentation as covers for his textbooks. Now if I could somehow ask him this and get an answer, I wouldn' t. I would surmise the lifetime I intend to spend studying, assimilating and applying calculus to my works will get me my own answers. And that will be priceless to me because they will be my own realistic deductions. Nothing beats that. This brings me to the discussion of this essay–limits, continuity and the indefinite zero quotient.

Limits and continuity which matter to human conception, perception, and the definitive resolve of everyday event possibilities, propensities and the understanding of such. I am going to discuss zero in the position of both the dividend and the divisor and the eventual quotients, the general interpretation in math and mine as well. Here it is important to note the necessity for the use of a number line to analyze my interpretations. Here is a sample number line.



If you key in zero in the dividend role, for example, $0/1$, in a calculus calculator, you will get the answer, that is, the quotient as 0. If you key in zero as the divisor, as example $1/0$, you will get an answer of "undefined". In this essay I will like you to explore these answers from the number line perspective in various forms and engage my perspectives as well.

In the role of the dividend, we can write $(1 - 1)/1$. Here I surmise there is no movement on the line at all. Or if you may, and your relevant understanding persists, you may draw a counterfactual anticlockwise arc. Simplistically, It's like having something cancel itself before it gets to divide by itself. It is as if an apple fell from a tree but by the time the apple got to the ground the tree could not be found. And then you are asking where the apple could have come from. The apple here being 0, then becomes an abstraction as the quotient because the tree cannot be found. The only way to imagine movement here, which is merely imaginative, is to have the zero go from $-$ 1to $+$ 1.

You will have to first imagine an abstract existence of a tree from which an apple falls which becomes a real tree with the $+$ 1 but must first cancel itself at 0. And this statement cannot afford to end on this positive note because we need zero to happen at the nominator level so this $+$ 1 must reverse back to 0. Thus we must have two zeros if you're paying attention and counting, which you must be able to do if you have any worthwhile knowledge of mathematics. Despite this, the quotient becomes two abstract apples.

In the divisor position, the states can also have two arrangements: $1/1 - 1$, and $1/ - 1 + 1$. In the first instance, there is absolutely no movement and there is no possibility of such. This is made more evident because this is the same as $1/1 - 1/1$. This doesn't seem undefined to me. You divide a tree by itself and remove its reality with its abstraction being divided by its abstraction. There is no apple drop. If there was some abstract apple, it would already be on the floor without any explanation for it because the denominator is there. It is, as a matter of fact, an impossibility rather than undefined.

The second situation we can rewrite as $1/-1+1/1$. If we read this semantically as we have thus far, the first division takes a realistic tree and divides it by an abstraction. In reality, you will retain the tree or at least the possibility of it. In the mathematical sense, you will retain the abstraction. You will get an apple, which is an abstraction. In the semantic sense of the possibility of such events applicable here, you will get two trees because when you have a real tree and an abstraction in real life, that is when you divide a real tree by the abstraction of a tree, you get a real tree which must then be added to the other tree. This is rather far from the purely mathematical lack of definitive intent on the event or the event itself. This concludes the extent of the discussion in this essay. As the title of this essay forewarns, I will discuss limits, continuity and the indefinite zero quotient further in a future chapter of *alw: an-animated-life*.

Author's endnotes

Chapter twelve of alw: an-animated-life releases this year and I will share cover and details of chapter 13 by the end of the year. To support these nonfiction endeavors, fictional endeavors, blogs, articles and essays available free on my site, please support the free books for life cause or support music by ril on BANDCAMP. Thank you for being here.

Eleven year old Bami Dele is the experimental boy immune to what scientists get to know as the Femuran invasion. He and the chosen bearer of the only artificially engineered artedermal skin protector must get past every formidable detection of the Time Weavers. They must find the game inside a dead cat by a corner, finish the play, find the location of the secret of secret places, make the journey to get the Polarcapper and turn the wheels against their doomed fate.

PLEASE DONATE TO SUPPORT THE FREE BOOKS FOR LIFE CAUSE